Service Date February 8, 1984

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

* * * * *

IN THE MATTER of the Application of PACIFIC POWER AND LIGHT COMPANY for Authority to Adopt New Rates and Charges for Electric Service Furnished in the State of Montana.	) UTILITY DIVISION)) DOCKET NO. 83.5.36)) ORDER NO. 5009a

APPEARANCES

FOR THE APPLICANT:
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FOR THE MONTANA CONSUMER COUNSEL:
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FOR THE COMMISSION:
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BEFORE:
HOWARD L. ELLIS, Commissioner, Presiding
CLYDE JARVIS, Commissioner
THOMAS J. SCHNEIDER, Chairman

PART A
BACKGROUND

1. The Pacific Power and Light Company (PP&L, Company or Applicant) is a public utility furnishing electric services to consumers in the State of Montana, and is subject to the regulatory jurisdiction of the Montana Public Service Commission

(PSC, Commission).

2. On May 10, 1983, PP&L filed with the Commission its application for authority to increase rates and charges for electric service. The proposed rates are designed to produce an increase in annual gross operating revenues of $5,825,000, based on a historic test year ending December, 1982, adjusted for known and measurable changes. Of this amount, the Company estimates that $1,689,000 can be recovered from the Bonneville Power Administration (BPA), pursuant to the terms of the Company's Residential Purchase and Sale Agreement with BPA authorized by the Pacific Northwest Electric Power Planning and Conservation Act (Regional Act). Therefore, the proposed tariff schedules are designed to produce a net revenue increase of $4,136,000 or 19.7 percent over the presently effective rates.

3. On June 8, 1983, the Commission issued a Notice of Application and Proposed Procedural Order. On June 28, 1983, the Commission issued a final Procedural Order.

4. The Montana Consumer Counsel (MCC) intervened and participated in this Docket on behalf of electric utility customers throughout these proceedings.

5. On May 18, 1983, the Commission received the Applicant's application for interim rate relief, subject to rebate, in the amount of $2,074,000. On August 5, 1983, the Commission granted PP&L interim revenue relief in Order No. 5009 in the amount of $1,575,000.

6. On October 25 and 26, 1983, pursuant to public notice, the

Commission held the hearing on this Docket in the City Council Chambers, Kalispell, Montana.

PART B

RATE OF RETURN

Capital Structure

7. Applicant proposed the following capital structure and associated costs (PP&L Exh. 3, RFL, Table 4-7):

Description	Ratio	Cost	Weighted Cost
Long-Term Debt	52.0%	10.19%	5.30%
Preferred Stock	12.0	10.99	1.32
Common.Equity	36.0	17.10	6.16
			12.78%

8. MCC proposed the following capital structure and associated costs (MCC Exh. 1, CMS-1, as updated during the hearing, TR, pp. 106-109):

Description	Ratio	Cost	Weighted Cost
Long-Term Debt	59.0%	9.49%	3.72%
Preferred Stock	12.9	10.02	1.29
Common Equity	28.1	13.25	5.60
			10.61%

9. Applicant proposed to utilize its target ratios in the capital structure. The Applicant's target ratios are: 52 percent long-term debt; 12 percent preferred stock; and 36 percent common equity (PP&L Exh. 3, p. 4).

10. Dr. Caroline Smith, who presented expert testimony for the Montana Consumer Counsel, used the end of the period capital

structure at August 31, 1983, as updated during the hearing (TR, pp. 106-109). Dr. Smith also proposed to adjust the common equity to eliminate the portion invested in nonutility subsidiaries (MCC Exh. 1, p. 5). In addition, Dr. Smith adjusted all of the permanent capital balances to reverse the effects of the exchange of first mortgage and pollution control bonds for shares of new preferred stock done during 1982 (MCC Exh. 1, p. 43).

Subsidiary Investment

11. Dr. Smith proposed to adjust the common equity portion of PP&L's capital structure to eliminate investment in nonutility subsidiaries. She argued that such a deduction is proper "because it is appropriate to assume that the Company's equity investments in its subsidiaries will earn an equity return equal to their own cost of common equity capital." (MCC Exh. 1, p. 44) Dr. Smith warned of the result of including the equity subsidiary investment in capital structure:

If the subsidiaries earn an equity return on the equity capital investment of PP&L, as recorded on its books of account, then the overall consolidated equity return will exceed the estimated consolidated cost of equity capital and the Company will have derived a windfall at the expense of utility ratepayers whose debt capital has been improperly attributed to subsidiary operations. (MCC Exh . 1, p . 44)

12. Company witness Mr. Robert Lanz, in his rebuttal testimony, expressed concern that elimination of subsidiary investments would cause the Company's cost of common equity to rise substantially above the 95 electric utilities' average relied upon by Dr. Smith (PP&L Exh. 21, p. 5). Lanz also argued that if

a cost of equity is based on an analysis of cost of equity for 95 electric utilities, then the related capital structure should also be based on the same group sample (PP&L Exh. 21, p. 5).

13. The Commission believes that the overriding argument in this issue is that if the Company's equity investments in nonutility subsidiaries are not removed from capital structure, the Company will receive an unwarranted return on nonutility operations. The Commission, therefore, finds the Consumer Counsel proposal of excluding equity subsidiary investment from capital structure to be proper in this proceeding.

Debt/Equity Exchange

14. Dr. Smith of MCC proposed to adjust all of the affected capital balances to reverse the exchange of first mortgage and pollution control bonds for shares of new preferred stock done during 1982. She proposed this adjustment to follow "the ratemaking treatment of the capital affected by the exchange ordered by the Montana Commission in Order No. 4975." (MCC Exh . 1, p . 43)

15. In deciding this issue, the Commission refers to page 14 of Order No. 4975 in Docket No. 82.7.53:

> The recently completed debt/equity exchange should not be recognized for ratemaking purposes.... Therefore, in future rate proceedings revenue requirement should be calculated as if the exchange had not taken place.

The Commission finds Order No. 4975 in Docket No. 82.7.53 to be the overriding factor in this issue, and therefore, finds MCC's proposal to reverse the effects of the 1982 debt/equity exchange on the Company's capital structure to be proper in this proceeding.

Equity Ratio

16. The Company expressed deep concern that the final result of accepting MCC's adjustments to capital structure would be an unreasonably low equity ratio. In rebuttal testimony, Mr. Lanz argued that Dr. Smith's proposed equity ratio of 29.9 percent (updated during the hearing to 28.1 percent) was unreasonably low and that a utility industry average, which closely coincides with PP&L's target capital structure, is a more reasonable figure (PP&L Exh. 21, p. 5).

17. Dr. Smith argued that her capital adjustments were necessary (1) to reverse the effects of the debt/equity exchange and (2) to guard against the Company earning a return on nonutility operations (MCC Exh. 1, pp. 43-44).

18. Under cross-examination by Commissioner Schneider, Dr. Smith addressed the issue of a reasonable equity ratio. Dr. Smith stated that her proposed equity ratio of 28.1 percent was "not out of the realm of reasonableness." (TR, p. 151) When asked about the reasonableness of an equity ratio of 18 percent, she expressed concern that this would be "pushing an unreasonable level" which might warrant "using a hypothetical" equity ratio (TR, pp. 150-151). Commissioner Schneider continued:

> Q. What if you went halfway, from 28 to 23?
>
> A. You're getting closer to it. I don't know what the break is, but 28 -- maybe anything below 25 you might say it's

looking less reasonable. (TR, pp. 151-152)

19. The Commission recognizes that in accepting the proposed adjustments of Dr. Smith, the resulting equity ratio is low enough to raise some concern. The Commission believes, however, that those capital adjustments are necessary to reflect properly the ratemaking treatment adopted by this Commission to insure fair treatment to the Company and its ratepayers. The Commission, therefore, rejects the Company's proposed hypothetical target capital structure and adopts MCC's actual capital structure as adjusted , through August 31, 1983. In making this decision, the Commission will note for future purposes Dr. Smith's statements concerning reasonable equity ratios (TR, pp. 148-152).

Cost of Capital

Long-Term Debt

20. The Company proposed the use of a projected cost of long-term debt as of December 31, 1983 in the amount of 10.19 percent (PP&L Exh. 4, Table 4-7). PP&L used a projected cost of long-term debt to best represent the cost of debt during the period the rates are expected to be in effect (PP&L Exh . 3, p . 13) .

21. MCC proposed to use actual data as of August 31, 1983, adjusted to exclude the effect of the debt/equity exchange on cost of long-term debt (TR, p . 108) .

22. The Commission has consistently viewed the updating of capital structure and costs as a positive way of more accurately portraying known and measurable capital costs. The use of actual

costs are viewed to be superior by the Commission over projected costs because projections are speculative in nature and not known and measurable. Pursuant to Order No. 4975 in Docket No. 82.7.53, the Commission finds the exclusion of the effects of the 1982 debt/equity exchange to be proper in determining PP&L's cost of long-term debt. The Commission, therefore, adopts MCC's proposed cost of long-term debt of 9.49 percent in this proceeding.

Preferred Stock

23. The Company proposed the use of a projected cost of preferred stock as of December 31, 1983 in the amount of 10.99 percent (PP&L Exh. 4, Table 4-7).

24. MCC proposed to use actual data as of August 31, 1983, adjusted to exclude the effect of the debt/equity exchange on cost of preferred stock (MCC Exh. 1, Exh. CMS-9).

25. The Commission has consistently viewed the updating of capital structure and costs as a positive way of more accurately portraying known and measurable capital costs. The use of actual costs are viewed to be superior by the Commission over projected costs because projections are speculative in nature and not known and measurable. Pursuant to Order No. 4975 in Docket No. 82.7.53, the Commission finds the exclusion of the effects of the 1982 debt/equity exchange to be proper in determining PP&L's cost of preferred stock. The Commission, therefore, adopts MCC's proposed cost of preferred stock of 10.02 percent in this proceeding.

Cost of Common Equity

26. Applicant uses the following methodologies in determining a return on equity of 17.10 percent:

(a) Discounted cash flow (DCF) basis. Concerning the dividend yield portion of the DCF analysis, the following expert describes Mr. Lanz' conclusion:

> . . .I believe that 10 to 12 percent is a reasonable estimate of the Company's dividend yield during the period which rates will be in effect. I have chosen a value above the high end of the recent yield range because of my belief that Treasury deficits and consequent borrowings will combine to require relatively high yields thus high costs of common equity. (PP&L Exh. 3, p. 16)

Concerning expectations of growth in dividends, Mr. Lanz used the predictions for PP&L by Value Line, Salomon Brothers Electric Utility Common Stock Market Data, and ARGUS Electric Utility Rankings for the time period 1981 to 1987 collectively to determine a growth range of 4.5 to 6.0 percent (PP&L Exh. 3, pp. 16-17).

Mr. Lanz concludes:

Classic discounted cash flow theory states that the required cost of equity is equal to dividend yield (10 to 12 percent) plus growth in dividends (4.5 percent to 6.0 percent). Based on the foregoing analysis, I believe that 14.5 percent to 18.0 percent would realistically cover the range of possible equity returns during 1984, with 17.1 being a reasonable cost of equity within this range. (PP&L Exh. 3, p. 17)

(b) Market/book relationship. On PP&L Exh. 3, Table RFL 4-6, Mr. Lanz shows market-to-book ratios for 22 electric utilities. Mr. Lanz made no comment concerning this study.

(c) Analysis of comparable companies. Mr. Lanz conducted a study of Baa utilities comparing their current yields and growth in dividends to determine a market capitalization rate. Lanz concluded:

Based on my comparable company analysis, Baa utilities are requiring returns on their equity in the range of 15.43 percent to 17.24 percent with an average value (including the Company) of 16.22 percent. I believe that within this range, the Company's perception by the investment community is below average. Therefore, a conservative return would be in the range of 17.1 percent. (PP&L Exh. 3, pp. 19-20)

(d) Reasonable differentials between the cost of common equity and cost of long term bonds. In this analysis, Mr. Lanz proposed that common stock is less secure than bonds and, therefore, demands a higher rate of return to compensate for a higher risk factor. Lanz testified as follows:

If one assumes an approximate 350-400 basis point spread between common equity and long-term debt, then equity costs based on the Company's April, 1983 first mortgage bond issue, 12.80%. . . would be approximately 16.30 to 16.80 percent. (PP&L Exh. 3, p. 18)

(e) Comparable Northwest electric utilities. In his rebuttal testimony, Mr. Lanz proposed to derive a return from the comparable Northwest electric - utilities, which are similarly affected by nuclear plant uncertainties. Results of this analysis yielded a common equity return range of 14.0 to 14.4 percent, which indicated to Mr. Lanz that MCC's equity return of 13.25 percent is flawed and should not be relied upon in this proceeding. (PP&L Exh. 21, pp. 6, 11)

Mr. Lanz summarized his analysis by testifying as follows:

After analyzing the factors which affect the Company's stock, and based on my analysis of the cost of common equity on a comparable company, differential over debt, and discounted cash flow basis, I believe that 17.1 percent is a conservative and reasonable cost of common equity for the period rates will be in effect. (PP&L Exh. 3, p. 20)

27. MCC uses the following methodologies in arriving at a return on equity of 13.25 percent:

a. Application of discounted cash flow (DCF) techniques to Applicant's financial data. The DCF methodology yielded a range of return on equity of 12.7 to 13.5 percent.

1. Dividend yields for 95 electric and combination electric and gas utilities traded on the New York Stock Exchange were calculated on an average price basis for the six months from October, 1982 through March, 1983. The average dividend yield for the 95 companies is 10.73 percent. (MCC Exh . 1, Appendix B, p. 2)

2. Expected dividend growth was calculated by examining growth rates in dividends, earnings, and book value over a ten year period for the companies in the study. The weighted average growth for these companies was 3.8 percent during that time period. (MCC Exh. 1, Appendix B, pp. 4-5, 8)

3. The model used by MCC was used to show the relationship between the cost of equity for the Applicant and the industry as a whole . (MCC Exh . 1, p . 15)

b. The reasonableness of the DCF approach was examined by performing a comparable earnings study. A tabulation of earned rates of return for 95 electric and combination utility companies indicated that average earnings on equity for the 1972-1981 period were in the 11 percent to 13 percent range. (MCC Exh. 1, p. 39)

28. Both MCC and PP&L used a DCF model to determine the cost of equity in this proceeding. In each model there are elements which are based upon the judgment of the particular witness. Upon viewing the two models presented, major differences appear. MCC used a large number of companies (95) for analytical purposes, while PP&L relied on projected estimates for Treasury Bill and

interest rates to determine dividend yield and various analysts' forecasts of PP&L growth expectations. (PP&L Exh. 3, pp. 16-17) This Commission has historically downplayed the significance of such subjective projections because they are difficult to test. This Commission also has consistently preferred the process of evaluating many companies in the DCF model so that factors which are unique to a particular firm can be eliminated. The Commission, therefore, finds the MCC approach to DCF analysis preferable to that of the Company in this proceeding.

29. Concerning dividend yield, the Commission found weaknesses in both the Company's and MCC's calculations. The Company's use of projected yield estimates is unacceptable for reasons stated above in Finding of Fact No. 28. MCC's methodology in determining yield is acceptable to the Commission, but the proposed yield of 10.7 percent for the six months ended March 31, 1983, is not based on reasonably current data. Since the approved capital structure has been updated through August 31, 1983, a proper matching would call for a more updated dividend yield average. Mr. Lanz of PP&L provided such an update in his rebuttal testimony. Lanz' Rebuttal Exhibit 2 shows PP&L's dividend yield average over six months ending July 31, 1983, to be 9.8 percent, which the Commission accepts as a reasonable calculation of PP&L's yield in this proceeding .

30. In determining PP&L's cost of common equity, the Commission concentrated on Dr. Smith's MCC Exh. 1, Appendix B, Tables B-7 and B-8. The Commission chose to disregard Dr. Smith's Table B-6 in calculating the proper return because this Table represents an extreme low based on a single growth factor. Dr. Smith's Tables B-7 and B-8 incorporate PP&L's three most important growth rates

and all growth rates based on the calculations of Table B-2 (MCC Exh. 1, App. B, p. 9). Tables B-7 and B-8 also incorporate industry yield and growth figures, PP&L specific yield and growth figures, and a PP&L risk factor. The results of Tables B-7 and B-8, expected growth rates of 2.05 percent and 3.68 percent, represent to the Commission the acceptable range of reasonableness for determining PP&L's cost of equity. The three most important growth rates - three-year book value growth, ten-year book value growth, and three-year earnings growth -- taken together explain a substantial portion of the variability in dividend yields based on the data on Table B-2. Incorporating all growth rates over a ten year period serves to give an overall view of PP&L's cost of equity and expected growth rate in relation to the industry as a whole over a long enough time period to show definite tendencies. The Commission believes that utilizing the growth rate of 3.7 percent (rounded), the high end of the range of reasonableness from Dr. Smith's Table B-8, offers a reasonable approach to meld together industry and Company figures on a weighted basis. Using the high end of the range of reasonableness for the expected growth rate is warranted in this proceeding, in light of the Company's actual dividend yield showing a downward trend since March of 1983 (10.7% to 9.8%) and the weighted average growth of 3.8 percent of the 95 companies (MCC Exh. 1, Table B-4) . Generally speaking, a decrease in dividend yield oftentimes indicates a related increase in expected growth. The Commission's use of the high end of the range of reasonableness for expected growth rate (2.1% to 3.7%) in this proceeding reflects the aforementioned downward trend of dividend yield and the weighted average growth of 3.8 percent of the 95 companies.

31. In recognition of the low equity ratio discussed in Findings of Fact Nos. 16-19, the Commission finds an increase in the cost of equity in the amount of 25 basis points to be proper in this proceeding. Under cross-examination by the Company during the hearing, Dr. Smith responded as follows:

> Q. All things being equal, do companies that are more highly leveraged have higher debt costs?
> A. The theory is that more leverage results in both higher debt and equity costs. (TR, p. 117)

The Commission views an addition of 25 basis points as a reasonable reflection of the low approved equity ratio of 28.1 percent. An increase of more than 25 basis points is not justified because of the relative proximity of the equity ratio in this proceeding (28.1%) to the approved equity ratios in Docket No. 82.4.28 (30.9%) and Docket No. 81.8.70 (30.8%).

32. Based on the discussions in Finding of Fact Nos. 29-31, the Commission determines that the acceptable rate of return on common equity in this proceeding is 13.75 percent (9.8% Dividend Yield + 3.7% Growth + .25% Low Equity Ratio Factor = 13.75%). This figure is above the upper end of the range recommended by Dr. Smith (13.5%) and below the lower end of the range recommended by Mr. Lanz (14.5%).

Rate of Return

33. Based on the findings for long-term debt, preferred stock, and common equity in this proceeding, the following capital structure and costs resulting in a 10.75 percent overall rate of

return are determined appropriate:

Description	Amount (000)	Ratio	Cost	Weighted Cost
Long-Term Debt	$1,578,208	59.0%	9.49%	5.60%
Preferred Stock	343,459	12.9	10.02	1.29
Common Equity	749,276	28.1	13.75	3.86
Total	$2,670,943	100.0%		10 75%

PART C
RATE BASE

34. Consistent with previous Commission decisions, both PP&L and MCC proposed a 1982 average rate base, adjusted to include certain known and measurable 1982 changes. One of the primary considerations of the Commission in rate base decisions has always been proper matching of test year income with the plant that produced that income. The Commission, therefore, finds a 1982 average rate base, adjusted for certain known and measurable 1983 changes, to be appropriate in this proceeding.

Net Plant in Service

35. PP&L proposed an average net plant in service "adjusted to reflect the transfer of the Company's Lincoln steam plant investment from electric operations to steam heat, since the Lincoln steam plant no longer provides generation for electric service. " (PP&L Exh. 9, p. 12) MCC proposed no adjustments to the Company's proposed average net plant in service. Since the Company's proposed figures comply with the accepted methodology of average year rate base, the Commission determines the proper amount of net plant in service to be $68,601,000.

Plant Held For Future Use

36. The Company's proposed rate base included $103,000 of plant held for future use. MCC witness Mr. George F. Hess proposed to eliminate from this account "land not scheduled for use prior to 1990 because such land does not qualify for rate base treatment under the Commission's imminent use test." (MCC Exh. 2, p. 8) The amount of proposed adjustment was $42,000. The Commission agrees with MCC that current ratepayers should not be burdened with carrying costs of property which will not be used in the imminent future. The Commission recognizes the Company's concern that a specific timeline for imminent use has not been determined, but the Commission agrees with Mr. Hess of MCC:

> . . . At this particular point in time, the Company cannot give a specific date because these parcels are future general rating sites for which there is not a definite plan of development at this point in time.

So the test that's being supplied here is not a specific number of years. Rather, it's a test of whether or not there is a definite use for these sites under a plan for which there is a reasonable expectation that they will be in service in a reasonable period of time.
(T R, pp. 200-201)

The Commission, therefore, accepts MCC's proposed adjustment in the amount of $42,000 and finds the proper amount of plant held for future use to be $61,000.

Acquisition Adjustment

37. Applicant's proposed rate base did not include an

acquisition adjustment. In past cases, this account represented the amount paid for property in excess of its original cost. The Commission agrees that an acquisition adjustment should be eliminated from rate base.

Nuclear Fuel

38. PP&L proposed a 1982 average level figure for nuclear fuel. MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology, and the proper amount of nuclear fuel included in rate base is $31,000.

Customer Advances For Construction

39. PP&L proposed a 1982 average level figure for customer advances for construction. MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology. The proper amount of customer advances for construction deducted from rate base is $339,000.

Materials and Supplies

40. PP&L proposed a 1982 average level figure for materials and sup plies. Based on the results of his production cost adjustment, Mr. Hess proposed to decrease the coal inventory portion of materials and supplies in the amount of $103,000 (MCC Exh. 2, Sch. 3, p. 1 of 3). MCC's proposed production cost adjustments will be fully discussed in the Revenues and Expenses section of this order. Based on the approved level of coal inventory, the Commission finds the proper amount of materials and supplies included in rate base to be $1,769,000

which includes the approved coal inventory adjustment of $65,000.

Cash Working Capital

41. The Company explained that ". . . The development of net cash working capital supplied by investors, as assigned and allocated to Montana, is based on a lead lag study performed by the Company for the 1982 test period. " (PP&L Exh. 9, p. 13) MCC made no adjustment to the Company figure. The Commission finds that the proper amount of cash working capital to be included in rate base is $918,000.

Extraordinary Property Losses

42. PP&L proposed a 1982 average level figure for extraordinary property losses. MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology, and the proper amount of extraordinary property losses included in rate base is $8-,000.

Unamortized Leasehold Improvements, Etc.

43. PP&L proposed a 1982 average level figure for unamortized leasehold improvements, etc. MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology. The proper amount of unamortized leasehold improvements, etc., included in rate base is $381,000.

Weatherization - Interest Free Loans

44. PP&L proposed a 1982 average level figure for Weatherization interest free loans. MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology; therefore, the proper amount of Weatherization interest free loans included in rate base is $419,000.

Customer Contributed Capital

45. The Company proposed to include, as a reduction of rate base, deferred income taxes resulting from the 1981 Tax Act, which represent the average accumulated deferred income taxes due to the use of ACRS tax depreciation for post-1980 additions (PP&L Exh. 9, p. 14). PP&L proposed to adjust deferred income taxes to include taxes on the Malin-Midpoint transmission facilities, a tax depreciation update, and "to reflect customer contributed capital (deferred taxes) since deferred taxes have been excluded from the cost of capital at zero cost as testified by Mr. Lanz, which is consistent with the MCC position and Commission Order in Docket No. 82.4.28." (PP&L Exh 9, p . 15) MCC proposed no further adjustment to this account. The Commission agrees that the Company's proposal reflects the preferred average rate base methodology. The Commission, consistent with prior decisions, therefore finds the removal of deferred taxes from rate base, as proposed by the Company, to be correct. The proper amount of customer-contributed capital deducted from rate base in this proceeding is $1,815,000.

Unamortized Investment Tax Credits

46. Mr. Stephen E. Pearson of PP&L testified, ". . . [F]or purposes of expediting the rate making process, the Company has elected to restore investment tax credits for pre-1981 additions over a two year period which is consistent with the MCC position and Commission order in Docket No. 82.4.28. " (PP&L Exh. 9, p. 17) Mr. Hess of MCC agreed with a two year restoral, but disagreed with the Company's adjustment to the amount of pre-1981 investment tax credits available before making the adjustment (MCC Exh. 2, pp. 8-12). For a full discussion of this issue please refer to Finding of Fact No. 119. The Commission, consistent with prior decisions and Finding of Fact No. 123, finds that unamortized investment tax credits are properly deducted from rate base and that the MCC proposal is preferred. Based upon adjustments in the rate base and the revenues and expenses sections, the amount of tax credits to be deducted is increased. In order to achieve an average adjustment, one-half of the net expense adjustment is deducted from rate base. The proper amount of unamortized investment tax credits deducted from rate base is $230,000.

Sale of Malin-Midpoint Transmission Line

Tax Deductions

47. Consistent with his testimony in Docket Nos . 81.8.70 and 82.4.28, Mr. Hess proposes that the proceeds PP&L received from the sale of these federal tax deductions, pursuant to a safe harbor lease transaction, should "be amortized above the net operating revenue line and that the unamortized balance should be deducted from rate base." (MCC Exh. 2, p. 8)
The Hess exhibits in this Docket, consistent with those of the

two previous Dockets, reflect his recommendation that the investment tax credits related proceeds should be amortized over a period of five years and the remainder of the proceeds should be amortized over a 30 year period in reverse order of the tax deductions associated with lease payments less interest income. (MCC Exh. 2, Sch. 2, p. 1 of 2)

48. Mr. Watson presented the Company's proposal, which would accept the first two years' amortization of the investment tax credits which has been proposed by Hess and accepted by the Commission, would be unchanged with the remaining 28 years of the 30 year period amortized on a straight-line basis to normalize the remaining benefits over the remaining life of the lease. (PP&L Exh. 27, pp. 11-12)

49. The Company disagreed with the Hess proposal contending: one, Mr. Hess did not provide justification in his testimony for his proposed adjustment; two, the Hess proposal is unreasonable and provides PP&L's ratepayers with significantly more benefit than the Company received from the transaction; and three, that Hess' proposed rate treatment is contrary to the intent of the Economic Recovery Tax Act of 1981 and the

Technical Corrections Act of 1982.

50. First, concerning the Company's initial disagreement with Hess, the Commission finds Mr. Hess' testimony in this Docket reflects the same position he has presented in prior Dockets, which the Commission has accepted. In this Docket, Hess did not change the previously approved amortization schedule, and the details of his position can be found in the official record of Docket Nos . 81.8.70 and 82.4.28.

51. Second, the Company contends that acceptance of the Hess approach will provide PP&L's ratepayers with a greater benefit than the Company received from the transaction. The Commission disagrees with this contention based on the amortization schedule proposed by Mr. Hess which flows back the proceeds of the sale in proportion to the reverse order of the
tax deductions associated with lease payments less interest income. Therefore, over the term of the lease, the benefits will have been fairly treated for both the Company and the ratepayers.

52. Third, the Company contends that the Technical Corrections Act of 1982 (P.L. 97-448, §102(a)(10)(A), 96 Stat. 2369, approved January 12, 1983), which amends the Economic Recovery Tax Act of 1981 (ERTA) mandates the Treasury Department "to promulgate rules requiring normalization of safe harbor leases entered into under ERTA for utility property. " (PP&L Exh. 27, p . 11)

The Technical Corrections Act of 1982 (TCA), §102(a)(10)(A), provides that §168(f)(8)(D) "Special rule for leases," of the Internal Revenue Code, as it existed prior to the passage of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), is amended as follows:
Under regulations prescribed by the Secretary (of the Treasury Department) public utility property shall not be treated as qualified leased property unless the requirements of rules similar to the rules of subsection (e)(3) of this section and section 46(f) are met with respect to such property.
Subsection (e)(3) of Section 168 of the Internal Revenue Code requires that Accelerated Cost Recovery System (ACRS) depreciation associated with public utility property be treated

under a normalized method of accounting. Section 46(f) of the Internal Revenue Code provides two ratemaking treatments for investment tax credits (ITC). One allows ITC to be deducted from rate base, and then restored to rate base over the economic life of the asset; and the second allows ITC to be amortized at the cost of service over the economic life of the asset, with no reduction from rate base. The Company contends that the first ratemaking treatment applies in this instance.

In Docket No. 82.4.28, the Company contended that Hess' proposal for the amortization of the safe harbor proceeds could jeopardize the Company's tax benefits resulting from its safe harbor lease transaction, because of the supposed likelihood of the Treasury Department disallowing the Hess proposal. At the time 82.4.28 was under consideration by the Commission, Treasury had not promulgated any regulations nor had the Technical Corrections Act yet been adopted.

Although the Treasury Department has to date not promulgated any regulations, the Company contends in this Docket that the TCA amendment to Section 168(f)(8)(D) and TCA's legislative history indicate that the Hess approach is unacceptable under the Internal Revenue Code provisions. The TCA legislative history language relied upon by the Company follows:

> The bill allows the Treasury Department to prescribe rules imposing normalization requirements with respect to public utility property that is subject to a safe harbor lease under section 168(f)(8).

53. This Commission does not want to jeopardize PP&L's tax benefits from its safe harbor lease transaction, but the Commission is not persuaded by the evidence presented in this

Docket, that the Hess proposal will result in PP&L losing its tax benefits. All of the Internal Revenue Code sections relied upon by the Company deal with the ratemaking treatment of "public utility property," not the ratemaking treatment of the "proceeds" received by a public utility from a safe harbor lease transaction. As stated earlier, no Treasury regulations have yet been promulgated, and it is not clear that, when and if any such regulations are adopted, they will address the ratemaking treatment of a utility's "proceeds" from a safe harbor transaction. The TCA amendment relied upon by the Company is likewise unclear in that it refers to "public utility property," and not safe harbor transaction proceeds.

If the Treasury Department promulgates rules contrary to the Commission's position, i. e. the Commission's acceptance of the Hess proposal, or if PP&L ~s able to get a Treasury ruling that the Commission's position is improper, the Commission will review the matter.

54. After reviewing the evidence in this Docket, the Commission finds in favor of the Hess approach, and this order will reflect MCC's various adjustments concerning this sale of tax deductions. The Commission continues to find, as it has in the previous two Dockets, that PP&L's tax benefit sale should be treated as a sale of utility assets for ratemaking purposes. The proper amount of rate base reduction from the sale of the Malin-Midpoint tax deductions is $704,000.

State Deferred Taxes

55. Mr. Hess of MCC proposed to reverse PP&L's provision for

state deferred income taxes "because there is no requirement that such deferred taxes be provided." (MCC Exh. 2, p. 13) PP&L did not challenge the MCC position, and the Commission concurs with MCC that no such requirement for state deferred income taxes currently exists. The Commission, therefore, finds a rate base increase in the amount of $7,000 to be proper in this proceeding to reflect the rate base effect of eliminating state deferred income taxes.

Total Rate Base

56. As a result of the various adjustments, the Commission finds the proper amount of total 1982 average rate base, adjusted for known and measurable changes, to be $68,791,000.

PART D
REVENUES, EXPENSES, AND REVENUE REQUIREMENT

57. Mr. Stephen E. Pearson of PP&L sponsored exhibits and testimony which detailed the cost of service and average rate base amounts which support the revenue increase of $4,985,000, prior to elasticity and attrition considerations, requested by the Applicant and based on an overall rate of return of 12.78 percent. He indicated that the Company utilized a 1982 historical test period as a basis for its filing and made various 1983 adjustments. Mr. Pearson concluded that, based on the test period ending December 31, 1982, the Company would require additional revenues of $4,985,000 in order to earn an overall return of 12.78 percent.

58. Mr. George F. Hess, a witness for MCC, presented testimony

and exhibits on the cost of service and the proper rate base. Mr. Hess urged the use of an average 1982 rate base, as was also proposed by the Company, adjusted for certain known and measurable 1983 changes. He prepared a series of schedules and presented related testimony which culminates with the change in revenues required to produce the 10.75 percent (later revised to 10.61%) rate of return recommended by Dr. Caroline Smith. Mr. Hess concluded that, based on the 1982 average test year, the Company requires additional permanent revenues of $47,000.

Operating Revenues

Investment Tax Credit Transfers

59. In order to comply with the Commission's Interim Rules, PP&L proposed an adjustment to operating revenues to include $21,000 in its interim application to reflect the recognition of interest earned by the Company resulting from the transfer of investment tax credits to subsidiary nonutility operations. This adjustment was made to comply with the methodology approved by the Commission in the previous order, Order No. 4928a for Docket No. 82.4.28. MCC adopted the interim adjustment and proposed no further adjustment to this account. Mr. Hess testified:

> In Docket No. 81.8.70 the Commission adjusted operating revenues to give the utility credit for utility investment tax credits transferred to non-utility operations in the past. The Commission reasoned that the transfer represented a loan from utility to non-utility operations for which the utility operations should be compensated. (MCC Exh. 2, p. 7)

60. In his rebuttal testimony, Mr. Watson of PP&L argued that only the poor financial performance of the regulated electric operations have caused investment tax credits to be available for nonutility subsidiary operations. Watson maintained, "Mr. Hess would further penalize the Company for these deficient earnings by imputing revenues to the electric operations in the form of alleged interest payments from the Company's non-utility subsidiary operations. " (PP&L Exh. 27, p. 7)

61. The Commission believes that since investment tax credits are being loaned to nonutility operations, the electric utility is entitled to earn interest on the transfer. The Commission finds, therefore, the MCC proposed revenue increase of $21,000, due to imputed interest from nonutility subsidiary utilization of investment tax credits, to be proper in this proceeding.

Normalized Firm Sales

62. In its filing, PP&L submitted the results of the production cost study containing the firm power sales under contract only for calendar year 1983 and disposing all remaining surplus power on a nonfirm basis. This approach is similar to the Company's proposal in Docket No. 82.4.28, when the Company felt that the normalized treatment of firm power sales would be unreasonable given the then current market conditions, and that the proposed method would be more indicative of market conditions during the period in which the new rates would be in effect.

63. Mr. Hess of MCC proposed that firm sales should be normalized. He testified:

Under the procedure used by the Company in this case, the excess resources are assumed to be sold at secondary rates, and the ratepayers are charged with the difference between the cost of firm resources and the price of secondary energy. It is not logical to assume that PP&L is acquiring new firm resources for the purpose of making secondary sales. (MCC Exh. 2, p. 4)

64. In Order No. 4928a of Docket No. 82.4.28, the Commission included some strong wording concerning adjustments for excess capacity (Order No.4928a, pp. 21-22). The Commission said that it may consider disallowing excess generating capability in the rate base or alternatively imputing revenues to off-system sales equal to PP&L's full revenue requirement of existing thermal facilities. Mr. Hess testified, "The assumed sale of excess adjusted firm resources at firm rates will help meet the concerns expressed by the Commission." (MCC Exh. 2, pp. 4-5)

65. Consistent with previous Commission decisions, the Commission finds the normalization approach proposed by Mr. Hess concerning firm sales to be appropriate in this proceeding. The Commission feels that normalization is a proper regulatory method in smoothing out the high and low periods of firm sales, and that to recognize particular economic conditions in favor of normalization as a whole would only serve to weaken the normalization process. The Commission agrees with Mr. Hess that the assumed sale of excess adjusted firm resources at firm rates help meet Commission concerns about excess capacity in rate base. The Commission, therefore, accepts the adjustment of Mr. Hess in the amount of $409,000.

66. The above adjustments to Operating Revenues result in present revenues of $27,135,000 ($26,705,000 + $21,000 + $409,000).

Expenses

Advertising

67. Mr. Hess proposed to adjust advertising expense to eliminate test year institutional advertising. Mr. Hess testified, "This Commission has consistently held that institutional advertising expenses should be borne by the utility's stockholders rather than its ratepayers. " (MCC Exh. 2, p. 2) The Commission agrees with Mr. Hess that such an adjustment would reflect past Commission policy. The Commission, therefore, finds the proposed MCC reduction of advertising expense in the amount of $15,000 to reflect the elimination of institutional advertising to be proper in this proceeding.

Sale of Tax Benefits

68. MCC witness Hess recommended the amortization of the proceeds that PP&L received from the sale of tax benefits. When PP&L received authorization for the sale of tax benefits this Commission clearly indicated that the proceeds from the sale of utility assets would be subject to a ratemaking determination. The Commission is not persuaded by the Company's argument that Montana ratepayers are no worse off under its proposal, than if the transaction had never occurred. The Hess proposal to amortize the proceeds over five and thirty years appeals to the Commission as an even handed sharing of benefits between the Company and its ratepayers. The adjustment of $186,000 is accepted by the Commission.

As discussed in Finding of Fact No. 53, when and if the U.S.

Treasury issues regulations that would indicate that the ratemaking treatment adopted by this Commission is improper, the Commission will review the matter.

Captive Coal

69. The Bridger Coal Company, a mine mouth operation, provides 100 percent of the coal fuel supply PP&L needs for the operation of its Jim Bridger electric generating plant. PP&L's subsidiary NERCO owns 100 percent of Pacific Minerals, Inc., which in turn owns two-thirds of Bridger Coal Company. The other one-third of Bridger Coal is owned by Idaho Power. PP&L and Bridger Coal have negotiated a contract which provides the coal price PP&L pays for its generating plant fuel supply, and it is this price that PP&L seeks to pass on to ratepayers as its captive coal expense.

70. The Montana Supreme Court addressed the Commission's duty to regulate a utility's expenses when those expenses are generated from a parent utility's subsidiary in Montana-Dakota Utilities v. Bollinger, _Mont. 632 P.2d 1086, 38 St. Rptr. 1221 (1981),

> A function of the PSC, in fulfilling its duty to supervise and regulate the operations of MDU as an electric utility, is to see that MDU's rates are just and nondiscriminatory. Section 69-3-330, MCA. In complying with this obligation, it follows that the PSC must scrutinize and review the operating expenses of MDU to prevent unreasonable operating costs from being passed on to the customer. When one of the expenses submitted by MDU is caused transactions with a subsidiary company, the scrutiny applied by the PSC must be all the more intense. (emphasis added) 632 P.2d at 1089, 38 St. Rptr.1224.

71. MCC witness Hess proposed an adjustment to eliminate the profit from the Bridger Coal Company which exceeded an equity rate of return of 15 percent. Mr. Hess calculated that in 1982, "on an adjusted basis, Bridger Coal Company earned income of $27.5 million on a $45 million rate base, or a rate of return in excess of 60 percent, " (MCC Exh. 2, p. 6)

72. MCC witness, Dr. John W. Wilson, performed two studies which indicated to him that a proper rate of return for Bridger Coal should not exceed 15 percent (MCC Exh. 3, p. 12). First, Dr. Wilson examined recent and projected rates of return for the six independent coal companies for which he could obtain public financial data. Second, Dr. Wilson performed a study of profit rates, earned by unregulated firms throughout the industrial sector of the U.S. economy. (MCC Exh. 3, pp. 11, 14)

73. The results from both of Dr. Wilson's studies indicated that a proper rate of return for Bridger Coal would not exceed 15 percent. The related captive coal adjustment reflects what Dr. Wilson professes to be a reasonable rate of return for the Bridger Coal Company based on MCC's "rate of return" methodology.

74. The Company's methodology concerning the captive coal issue was the "market price" approach. Mr. Watson and Mr. Lawrence C. Grundmann, Jr., presented evidence that an independent, competitive coal market exists on which Pacific could have procured coal in lieu of entering into the Bridger contract, and that the terms of the Bridger contract, and the price paid pursuant to it, compare favorably with what would have been available on the open market. (PP&L Exh. 27, p. 1; PP&L Exh. 25,

p. 11)

75. In his testimony, Mr. Watson drew the following conclusions:

> (1) Bridger's contract price for coal sold to the Company during the period was more favorable to electric customers than 25 of the 28 other supply arrangements for which data was available, both on the basis of cost per ton and cents per million Btu (MMBTU); (2) on an adjusted basis the Bridger's contract price amounted to $ .96/MMBTU delivered, compared to an average price, FOB mine, for the other 28 sales during the period of $1.37 MMBTU. The average cents per million Btu associated with long-term coal sales made from July, 1982 through February, 1983 from the Montana and Wyoming coal region is approximately 1.4 times the price sponsored by the Company for coal deliveries made from the Bridger Coal Company. (PP&L Exh. 27, pp. 2-3)

76. Mr, Grundmann analyzed the Bridger coal contract and concluded that not only did it appear to be the product of a negotiation process, but if anything, it was at least as favorable to the utility purchaser and its rate payers as to the seller. (PP&L Exh. 25, pp. 14, 16, 36) With regard to a comparison of the average delivered price of coal from other Montana and Wyoming mine sites, Mr. Grundmann determined the following:

> For the July, 1983 time frame, I found the following based on the cost per MMBTU: First, that the average delivered price of all of the proposals is almost half again (146 percent) as much as the actual price for the Bridger Contract, and any individual proposal is at least 20 percent greater. (PP&L Exh. 25, pp. 19-20)
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> * * *
>
> Further, it should be emphasized that it is only the Campbell County [Wyoming] mines, with their distinctive characteristics, which consistently show lower mine-mouth proposal prices. All others, whose mining characteristics more generally approach that of Bridger, are priced

higher than the actual Bridger Contract prices. If you exclude the Campbell County mines from the analysis, D even on the inappropriate direct mine-mouth comparison, the Bridger price is lower than any of the alternatives.... In July 1983, the Bridger price is still 5 percent lower than the average of the non-Campbell County mines. (PP&L Exh. 25, pp. 21-22)

77. Mr. Watson criticized the MCC calculations in various areas. First, Mr. Watson maintained that Mr. Hess' analysis of Bridger Coal profits reflected adjusted price levels for revenues, but made no adjustment for increased expenses or other costs, resulting in a grossly overstated return. Watson continued:

> In addition, Mr. Hess' computation of Bridger's earned return is in no way similar to Dr. Wilson's computations of comparable company and industry returns. Therefore a comparison of Mr. Hess' 60 percent return with Dr. Wilson's 15 percent return is not a meaningful comparison. (PP&L Exh. 27, p. 27)

78. The Company attacked Dr. Wilson's adjustment (and his rate of return methodology in general) contending: (1) there are computational and allocational errors in his comparable coal company test, (2) that the comparability of Wilson's coal companies used to calculate a reasonable return is questionable, and (3) the use of the year 1982, an economically depressed year for the coal industry, for return comparisons is questionable.

79. In making its decision, the Commission found weaknesses in both approaches used to determine the captive coal expense. The Company's "market approach" was fairly thorough. However, as explained on page 41 in Order No. 4714a of Docket No. 80.4.2,

from the Department of Justice report "Competition in the Coal Industry":

> In practice, however, because of the nature of the coal markets, identification of the appropriate competitive prices is virtually impossible Coal prices are not some broad rational aggregate but are tied to a very specific location and quality factors. In addition, a significant portion of the steam coal is sold by long-term contract. Thus it may prove difficult to estimate an appropriate set of market prices to use to check a utility's accounting price of coal. (emphasis added) (TR, pp. 47, 48 of Docket No 80.4.2)

One of the very prominent weaknesses in the market approach is that coal from outside areas of the generating units require varying degrees of transportation and related costs which can greatly distort the comparability of using shipped coal versus a minemouth operation. Although the market may show the economic advantage of a minemouth operation, the relative comparability of the coal prices may be forfeited because of inordinate, dissimilar costs such as transportation.

80. The Commission notes with interest that Mr. Grundmann's testimony seems to indicate that Bridger's position in the "competitive market, " based on the Company's "market approach, " is deteriorating compared to the data sponsored by Mr. Grundmann in Docket No. 82.4.28. In Docket No. 82.4.28, Grundmann reiterated Watson's testimony in stating, "Bridger's contract price amounted to $0.80/MMBTU delivered, compared to an average price, FOB ~. mine, for the other 27 sales during 1982 of $1.35 MMBTU. " (Docket No. 82.4.28, PP&L Exh. 23-T, p . 15) Similar

testimony by Grundmann in this proceeding yielded a Bridger Contract price of $0.96/MMBTU compared to $1.37 MMBTU for the other sales (PP&L Exh. 25, p . 15) . A comparison shows that Bridger's price increased by $0.18/MMBTU, while the other sales increased by $0.02/MMBTU.

81. In both Dockets, Mr. Grundmann compared delivered prices of Bridger Coal to those of mines in the Wyoming and Montana regions on a cost per MMBTU basis. In Docket No. 82.4.28, he testified:

> First, that the average delivered price of all the proposals is still almost double (183 percent) the actual price for the Bridger Contract, and any individual proposal is at least 58 percent higher. Second, even if a comparison were to be made on a mine-mouth basis (which, again, I do not believe is appropriate), the average FOB mine price of all of the proposals is almost 10 percent higher than the actual price for the Bridger Coal. (Docket No. 82.4.28, PP&L Exh. 23-T, pp. 19-20)

In the current Docket, Mr. Grundmann made a similar statement concerning the first scenario quoted above, but the percentages are reduced from 183 to 146 percent and from 58 to 20 percent respectively. Concerning the second scenario quoted above, Mr. Grundmann does not discuss the results of such a comparison in the current Docket.

82. Concerning a price comparison of non-Campbell County, Wyoming, mines to Bridger, in Docket No. 82.4.28, Mr. Grundmann stated, "In the third quarter of 1982, the Bridger price is still almost one-third lower than the average of the non-Campbell County mines." (Docket No. 82.4.28, PP&L Exh. 23-T, p . 22) Comparatively, in the present Docket, Grundmann testified, "In July 1983, the Bridger price is still 5 percent lower than the average of the non-Campbell County mines." (PP&L Exh. 25, p. 22)

83. The Commission finds, based on the comparison between Mr. Grundmann's testimony in Docket No. 82.4.28 and the current Docket, that the Company's "market approach" indicates a definite deterioration in Bridger's market position with competitive coal sources.

84. In captive coal situations, a subsidiary of the utility is supplying coal to the utility as a result of a contract between the parent utility and its subsidiary. Mr. Grundmann agreed that the Bridger contract was not the result of arm's-length negotiations (TR, p. 321) between Bridger and PP&L, as would normally be the case in a competitive market. As a result of the parent/subsidiary relationship in this very important aspect of electric utility operations, the Commission must scrutinize carefully the effects of that contract on the rates paid by the ultimate customers. The Commission must
determine a reasonable level of coal expense much the same as it would determine any other operating expense of a regulated utility.

85. Dr. Wilson's use of comparable coal companies to test the reasonableness of a captive coal company's profits provides some useful guidelines for determining a reasonable level of profitability for Bridger Coal Company. There are, however, some problems with the comparability of companies used by Dr. Wilson. Perhaps most prominently, is his inclusion of eastern mining operations with characteristics significantly different from the Bridger operation. As Dr. Wilson pointed out, these problems are in significant part caused by the unavailability of public financial information for coal companies (MCC Exh. 3, pp. 11-12).

86. During the hearing, PP&L questioned Dr. Wilson's calculation of the Pittston Coal profits and return (TR, pp. 271-276). The Company felt that $34 million of coal mine write-offs should not be included in the return calculation. Removing this loss results in an equity return of approximately 5.5 percent, without figuring an adjusted tax effect of the loss removal (MCC Exh. 3, Exh. JW-3, p. 6 of 7). Substituting this new return figure for Pittston results in an average equity return for the six comparable coal companies in the amount of approximately 11.4 percent (MCC Exh. 3, JW-3, p. 1 of 7).

87. The comparable companies study shows that a 15 percent return on equity does not appear to be an unreasonable level of profits compared to the somewhat lower average of 11.4 percent equity return for six companies who have substantial coal operations and whose financial statements are publicly available.

88. Because of the difficulties inherent in finding truly comparable coal companies with which profit comparisons can be made, the Commission finds it reasonable, as a check to admittedly imperfect data, to look at other areas of the economy for profitability figures. Dr. Wilson presented evidence showing that other sectors of the economy earned between 10 and 11 percent on average in 1982 (MCC Exh. 3, JW-7, p. 1, JW-8, p. 1). Of even more significance in the Commission's opinion, is the profitability of corporations denoted as natural resource or coal companies on MCC Exh. 3, JW-7 and JW-8. Page 1 of Exhibit JW-7 shows a 1982 equity return of 13.2 percent for petroleum and coal products companies. Exhibit JW-8 shows a 1982 equity return of 13.1 percent for natural resources (fuel) companies, down from

18.6 percent the previous year. Pursuant to Commission request during the hearing, Dr. Wilson supplied a late-filed exhibit which listed the various companies making up the natural resources (fuel) section on Exhibit JW-8. The late-filed exhibit also listed the particular fuel marketed by the respective company. For those companies listing coal as a marketed fuel, the average equity return for 1982 was 12.4 percent compared to 15.21 percent in 1981. All these figures point to the reasonableness of Dr. Wilson's proposed Bridger equity return of 15 percent. The Commission is fully aware that an economic recession in 1982 causes industry return figures to decrease compared to 1981 figures. Since 1981 represents a more normal year economically, the 1981 equity return figure of 15.21 percent for natural resources (fuel) companies marketing coal compares favorably with Dr. 7 Wilson's recommended coal profit level of 15 percent.

89. As discussed earlier, the Commission has a duty to closely scrutinize the reasonableness of a regulated utility's expenses when those expenses are generated by a subsidiary of the parent utility. This parent utility, subsidiary-coal supplier relationship exists between PP&L and Bridger Coal, and affects the riskiness of the Bridger operator.

90. It is an axiom in the financial community that the determination of what a reasonable profit is depends to a large extent on the risk involved in that particular business. The higher the risk involved, the higher the profits that investors expect to compensate for their risk of loss.

91. Dr. Wilson claimed, in his direct testimony, that the Bridger Coal operation has relatively low risks due to its relationship

to PP&L, and the fact that it is a captive coal supply for PP&L. (MCC Exh. 3, p. 18) The subsidiary enjoys the security of a captive market through its long-term contract with its parent PP&L as purchaser. PP&L, on the other hand, enjoys a secure coal supply from the Bridger subsidiary insulated from the high cost of coal transportation.

92. Dr. Wilson elaborated that an analysis of Value Line's safety price stability and earnings predictability indicates that the coal industry, as a whole, is only marginally more risky than other publicly trades firms. Additionally, captive coal operations are less risky than the coal industry due to their relationship with parent utilities. (MCC Exh. 3, pp. 17, 18)

93. Mr. Grundmann claimed in his direct testimony that Bridger Coal has risks under its contract, e. g. risk of productivity and cost of capital risk, but he also stated such risks are normal to all coal suppliers with long-term contracts. (PP&L Exh. 25, p. 31) Grundmann also testified that he believed a mine mouth captive coal company is riskier than other natural resource companies, because the coal supplier has the parent utility's generating plant as its sole market, and the plant is usually designed to use only the supplier's coal. (TR. p. 326)

94. The Commission does not find Mr. Grundmann's contentions persuasive. The Commission does not conclude that Bridger should be able to charge a coal price to PP&L, to be paid by PP&L's ratepayers, that reflects profits far above other coal operations and other natural resource companies, many, if not all, of which do not enjoy the risk reducing characteristics enjoyed by Bridger Coal.

95. Use of natural resource industry return figures to determine a reasonable level of coal profits is proper because of similar risk factors in operations. Whether the product is coal, oil, or natural gas, many aspects of operation are similar, such as problems of depletion, exploration, and development.

96. Based primarily on the natural resource industry return figures shown on MCC Exh. 3, JW-7 and JW-8, as well as the individual company return figures shown in Dr. Wilson's late-filed exhibit, the Commission determines expenses which yield a 15 percent return, as recommended by Dr. Wilson, to be a proper level of equity return for the Bridger Coal operation in this proceeding. This return figure compares very favorably to 1982 equity return figures for the coal industry (between 11.4 and 12.4 percent), petroleum and coal products (13.2 percent), natural resources (fuel) (13.1 percent), and industries as a whole (11.0 percent).

97. In analyzing Bridger's return levels for 1982, all calculations center on PP&L's response to MCC Data Request No. 2. Mr. Hess adopted several ratemaking type adjustments shown on pages 6 and 7 of the response to DR No. 2 to calculate an overall return in excess of 60 percent for Bridger (MCC Exh. 2, p. 6). The Company argued that such analysis is incorrect and unfair because Dr. Wilson used no ratemaking type adjustments in calculating the returns on equity of his comparable coal or industry companies. (PP&L Exh. 27, p. 3)

98. The Commission believes that the most reasonable approach to calculating Bridger's return figures is to look at the actual results of operation. Because Bridger Coal is an unregulated

enterprise, it is improper to apply regulated-industry type adjustments to its financial statements. Bridger's 1982 results of operations, adjusted to show only Bridger-related coal sales, are shown in column 2, page 6, of PP&L's response to MCC Data Request No. 2. These figures show 1982 Bridger-related income of $21.5 million and a net investment, referred to as "average rate base" in PP&L's response to MCC Data Request No. 2, of $66 million, resulting in a return on investment of 32.65 percent. Comparatively, the figures on investment from column 2 of page 6 (revised) in PP&L's response to MCC's similar data request (DR No. 14) in Docket No. 82.4.28 yield a 1981 Bridger overall return of 18.93 percent.

99. During the hearing, Mr. Watson discussed Bridger's 1982 profit levels. Watson stated that if one were to use Mr. Hess' adjusted asset base, the return on investment would be driven down to 48 percent from Mr. Hess' calculated return on investment of 60 percent (TR, pp. 354-355). Watson continued, "If you were to use the total asset concept, you'd drive it (Bridger's return) down to 33%. " (TR, p. 355) The 33 percent return figure corresponds very closely to the Commission's own calculation of 32.65 percent for the Bridger return on investment. Mr. Watson discussed another return calculation of 24.4 percent which he said represented a return on book equity (TR, p. 355). This return figure is also alarmingly high compared to Dr. Wilson's recommended 15 percent return level and returns for natural resource (fuel) companies of 13.1 percent (MCC Exh. 3, Exh. JW-8).

100. During the hearing, Mr. Grundmann acknowledged that the Bridger contract was "adjusted" (MCC used the word "reopened,"

but PP&L advocated the use of "adjusted" - TR. pp. 333,363) in January of 1983 retroactive to July of 1982 (TR. pp. 333-334). The effect of this contract "adjustment" is to raise the price of coal from $14.586 per ton in June of 1982 to $18.691 per ton in July of 1982 (PP&L Exh. 26, Exh. LCG-2), an increase of over 28 percent. Since PP&L acknowledges that the Bridger contract was not the result of arm's-length negotiations, because of the parent-subsidiary relationship (TR. p. 321), the Commission views such "adjustments" to the contract as events which must be carefully scrutinized to insure that utility coal expense levels do not become excessive to the detriment of PP&L's ratepayers.

101. The Commission finds that the above analysis indicates that a captive coal adjustment is proper in this proceeding; whereas the evidence in Docket No. 82.4.28 did not warrant such an adjustment. Comparing the two responses to MCC Data Requests in Docket No. 82.4.28 and the current Docket, shows that Bridger's actual gross revenues increased over 12 percent from 1981 to 1982, while expenses increased less than 2 percent during the same time frame. The Commission also notes with interest that Bridger's return on investment levels soared in 1982 while the rest of the economy was suffering through a severe recession, a further fact which points to the necessity for making a coal expense adjustment for PP&L.

102. Based on all of the information presented, the Commission finds that -- the coal expenses claimed by PP&L that reflect a 30 plus percent profit figure are excessive and should be reduced to reflect expenses that would yield profits to Bridger Coal Company of 15 percent.

103. In determining the proper amount of captive coal adjustment, the Commission agrees with both PP&L and MCC that the leases associated with Bridger's financial statements in PP&L's response to MCC Data Request No. 2 should be treated as operating leases rather than capital leases. This treatment, a decrease in Bridger's asset base and an increase in expenses, causes a minimal effect on the captive coal adjustment computation, while providing a very reasonable capital structure. The offsetting aspects of this treatment are to take the leases out of the capital structure and add them back into the income statement as an operating expense (See Hess testimony, TR pp. 222-224). The Commission, therefore, accepts the changing of capital leases to operating leases for purposes of determining the appropriate captive coal adjustment. Both PP&L and MCC agree that this is acceptable, given the difficulty of determining a proper capital cost rate for the leases, and because the overall effect of this change is minimal.

104. In calculating the captive coal adjustment, the Commission finds the use of Bridger's actual 1982 average net investment (referred to by PP&L in its Response to MCC Data Request No. 2, p. 6, Col. 2, 1. 24, as "average rate base"), adjusted only for the aforementioned leases, to be proper in determining Bridger's allowable return and, thus, PP&L's allowable Bridger coal expense. This approach is consistent with the Commission's preference for analyzing Bridger's actual profit levels without attributing ratemaking adjustments to Bridger's financial statements. Use of Bridger's actual "average rate base" is in accordance with the testimony of Mr. Watson:

If you were to redo his [Mr. Hess'] calculation and use what I think is a proper asset base, you would drive that down, or use his [Mr. Hess'] asset base and drive it down to about 48%. If you were to use the total asset concept, you'd drive it down to 33%.... (TR, pp. 354-355) (emphasis added)

Commission analysis of Mr. Watson's above testimony indicates that he advocates the use of Bridger's actual 1982 average net asset base, the "total asset concept," as being Bridger's "proper asset base."

105. The captive coal adjustment is, therefore, calculated as follows:

		(000)
Bridger Coal 1982 Actual Net Investment	$66,000	
Less: Capital Leases	14,676	
Bridger Coal 1982 Adjusted Net Investment		$ 51,324
Return @ 13.18% (A)		$ 6,765
Actual Net Income	$21,547	
Less: Operating Lease Expense	382	
Adjusted Net Income		21,165
Excess Net Income		$ 14,400
Current Tax in Excess of Minimum	$ 6,318	
Less: Operating Lease Tax Effect	350	
Adjusted Current Tax in Excess of Minimum		5,968
Excess Revenue		$ 20,368
Bridger Coal Sales - Tons		6,025
Excess Cost Per Ton		$ 3.38
Pro Forma Cost Per Ton		$ 18.28
Adjusted Cost Per Ton		$ 14.90
Bridger Production Cost Tons		3,865
Coal Expense		$ 57,589
PP&L Proposed Coal Expense		70,524
Adjustment		$(12,935)
Allocation Factor (Note 1A from PP&L Workbook No. 6)		X.028826
Adjustment to Montana		$ (373)

(A) Pacific Minerals Capital Structure without Capital Leases (MCC DR No. 2, p. 3A).

Description	Amount (000)	Ratio	Cost	Weighted Cost
Long-Term Debt	$30,973,092	36.45%	10.02%	3.65%
Common Equity	53,990,407	63.55	15.00	9.53
Total	$84,963,499	100.00%		3.18%

106. Based on the above calculations, the Commission finds a decrease to PP&L's Bridger coal expense in the amount of $373,000 to be proper in this proceeding. The Commission's approach recognizes that price comparisons are not controlling in the analysis of affiliated transactions; rather, it is the cost of the commodity, including the element of return or profit, which must be examined.

107. During the hearing PP&L was questioned concerning why portions of the Company's coal reserves have been included in PP&L's rate base, while the coal reserves for the Jim Bridger generating plant have not. The classification of coal reserve operations as a nonutility or utility function becomes important to electric ratepayers due to the different ratemaking treatments afforded to the coal fuel expense. It is not clear to the Commission why coal reserves for the Jim Bridger plant should be considered a nonutility function with its ratemaking treatment based on comparable profits and prices, while other PP&L coal reserves are considered a part of PP&L's rate base.

108. Public utilities are required to provide service at the lowest reasonable rate, and the Commission is required to allow rates that reflect the lowest reasonable costs. In view of those requirements, it is reasonable for the Commission to question why PP&L's electric rates should not reflect that coal reserves held

by its subsidiary, NERCO, acquired by PP&L for utility service, should not be treated, for ratemaking purposes, in the same manner as coal reserves PP&L currently has in its rate base. If PP&L had not J formed NERCO, but had simply held its coal reserves as Plant Held for Future Use, the coal supplies would be expensed to PP&L ratepayers at the cost of acquisition plus operation and maintenance costs.

109. The Commission requests PP&L to present evidence in its next electric rate case to address the issues raised in Finding of Fact Nos. 107-108. Failure to do so will be viewed as a failure to file a sufficient application .

Coal Expense

110. Concerning the coal price at the Wyodak plant, MCC in its Opening Brief agreed that the utilization of the August, 1983, cost for Wyodak as shown in Mr. Watson's Rebuttal Exhibit Table 2, is appropriate "because the reflected figure is in line with actual unit cost experiences during 1983 through June. " (MCC Opening Brief, p. 11)

111. Concerning the coal price for the Wyodak plant, the Commission accepts the August, 1983 price as it appears on Mr. Watson's Rebuttal Exhibit, Table 2, and adopted by MCC in its Opening Brief. Accepting such reasonable updating is consistent with Commission rulings concerning this issue in Docket Nos . 82.4.28 and 81.8.70. The Commission reiterates its position that the use of an inflation factor in determining the unit price of coal is unacceptable as such projected inflation levels are not known and measurable. Using the updated Wyodak coal price of

$7.46 per ton results in a $7,000 increase in Wyodak coal expense.

112. Concerning coal expense for the Centralia and Dave Johnston plants, PP&L proposed to use the average coal price over the four month period of September through December of 1982, multiplied by an inflation factor of 6 percent on an annual basis. The resulting coal price was $10.37 for Dave Johnston and $19.88 for Centralia (PP&L Book 5, pp . 2-8) .

113. For Dave Johnston and Centralia coal expense, MCC proposed to use the average price for the 12 months ended March, 1983. Mr. Hess stated, "An annual average should be used for Dave Johnston and Centralia because the monthly prices at these plants varies significantly from month to month. " (MCC Exh. 2, p. 5) Mr. Hess did not include an adjustment for projected inflation because he believes that projected inflation does not qualify as a known and measurable change. (MCC Exh. 2, p. 5)

114. In rebuttal testimony, Mr. Watson of PP&L argued in favor of the use of an inflation factor saying that inflation "does and will continue to exist." (PP&L Exh. 27, p. 6) Mr. Watson included a table showing updated coal costs using a 12 month average ending August, 1983, for Dave Johnston and Centralia and August coal cost for Wyodak (PP&L Exh. 28, Table 2, 1. 8). Mr. Watson stated that, at a minimum, these updated coal prices should be used (PP&L Exh. 27, p. 6).

115. Mr. Hess disagreed with updating average coal prices for Dave Johnston and Centralia beyond March, 1983:

I did not include experience after March 1983 because the unit coal prices at these plants in later months is distorted by reduced thermal output resulting from large amounts of hydro energy available last spring and summer. (MCC Exh. 2, pp. 5-6)

116. Concerning the issue of adding prospective inflation to coal costs, the Commission has consistently ruled that such inflation is not a known and measurable change. In keeping with past decisions, the Commission agrees with the MCC proposal of elimination of the Company's inflation factors for the cost of coal.

117. The Commission agrees with Mr. Hess that including experience after March, 1983, for the Dave Johnston and Centralia plants would be improper because of the distortion of reduced thermal output resulting from large amounts of hydro energy available last spring and summer. The Commission, however, believes that an increase of coal costs at these two plants equal to the percent increase of Wyodak coal costs between March and August ($7.098 to $7.46) is reasonable. The Commission, therefore, finds the use of MCC's proposed coal costs at the Dave Johnston and Centralia plants, increased by 5.1 percent, reflecting a reasonable increase in price similar to that experienced at the Wyodak plant, to be proper in this proceeding.

118. The following calculation demonstrates the approved coal expense in this proceeding:

	Tons	Price	Expense (000)
Bridger	3,865	$14.90	$ 57,589
Centralia	2,272	17.49	39,737
Dave Johnson	3,567	11.14	39,736
Wyodak	1,431	7.46	10,675
Total $147,737			
Company Pro Forma Coal Cost			$163,238
Adjustment			$ (15,501)

Montana Portion (Note 1A- . 028826 from Workbook #5) $ (447)

Restoration of Unused Investment Tax Credits

119. The Company, for purposes of expediting the rate making process, "has elected to restore investment tax credits (ITC) for pre-1981 additions over a two year period which is consistent with the MCC position and Commission order in Docket No. 82.4.28. " (PP&L Exh. 9, p . 17) Mr. Hess of MCC agreed with a two year restoral, but disagreed with the Company's adjustment u to the amount of pre-1981 investment tax credits available before making the adjustment (MCC Exh . 2, pp . 8-12) .

120. Mr. Hess disagreed with PP&L's calculation of ITC restored in the test year for three reasons:

First, PP&L had about $57 million of pre-1981 investment tax credits available at the end of 1982, not the $9,374,000 it calculates it would have had available in the absence of the nuclear abandonments.

Second, even if one were to assume there had been no nuclear plant write-off's in 1982, approximately $2 million of the $48.5 million of unused pre-1981 investment tax credits available in 1982 would have been allocable to Montana. My calculations in Exhibit GFH-2 show that at the recommended return allowable in the State of Montana it would take about two years to use up $2 million of investment tax credits.

Third, again assuming no nuclear plant write-offs and that $2 million of pre-1981 investment tax credits were deferred in Montana in 1982, there would still be a restoral of $1 million in 1983. In other words, with a two-year restoral, $1 million would be restored in 1982 and the second million in 1983. PP&L is ignoring the second year's restoral. (MCC Exh. 2, p. 11).

121. Mr. Watson argued against the claims of Mr. Hess in his rebuttal testimony. Watson's major contention was that the Company's 1982 write-off of nuclear plant investment caused an extraordinary taxable income loss carry back sufficient to free up $48 million of previously utilized investment tax credits; therefore, for "Mr. Hess to implicitly claim that the loss should be borne by the stockholders, but the tax benefits be given to the ratepayers" is unreasonable (PP&L Exh. 27, p. 9).

122. The Commission agrees with the concept of restoring pre-1981 ITC over a two year period, as advocated by both PP&L and MCC in this proceeding. This treatment is consistent with previous Commission decisions in Docket Nos. 82.4.28 and 81.8.70.

123. Concerning the issue of the amount of pre-1981 ITC, the Commission, after careful consideration, agrees with the position of MCC. A couple of arguments seem overriding: First, the $57 million of ITC in question are all pre-1981; and, second, the assets which created the ITC have been paid for by ratepayers as none of the ITC were actually created by abandoned nuclear plant investment (TR, p. 225). Since the ratepayers have paid for the assets which created the ITC, the ratepayers also deserve to realize the tax credit benefits associated with those assets. Whether or not these tax credits would have been used because of an extraordinary loss write-off is irrelevant, because the major point is that they existed as pre-1981 ITC and were subject to utilization as direct offset to taxes. The Commission believes that adopting the Company's stance on this issue could fall under the category of retroactive ratemaking, similar to allowing a utility to be given a revenue increase to compensate for the utility's inability, in a previous year, to realize its allowed rate of return. Such action would set a dangerous

ratemaking precedent. The Commission, therefore, finds the MCC adjustment to the restoration of unused pre-1981 investment tax credits, an increase to utility operating income in the amount of $131,000, to be proper in this proceeding .

Pro Forma Interest

124. MCC witness Hess calculated pro forma interest expense in an effort to include interest on construction. Mr. Hess noted in his testimony that the Company excluded Colstrip CWIP from the base on which pro forma interest was calculated, under the assumption that its interest in Colstrip would be sold. Hess included the Colstrip CWIP in the base because the Company's Colstrip interest had not yet been sold. (MCC Exh. 2, p. 13)

125. The Commission finds that a pro forma interest adjustment is proper to reflect the tax effect of interest on construction. The Commission also finds the inclusion of Colstrip CWIP in the base to be proper because PP&L has not yet sold its interest in the Colstrip project. By utilizing the approved rate base and weighted cost of long-term debt in the methodology, the Commission finds a decrease to Montana Corporation License Tax in the amount of $27,000 and a decrease to Federal Income Tax in the amount of $26,000 to be proper in this proceeding.

Attrition

126. In its initial filing, the Company proposed an attrition adjustment of $468,000 (PP&L Exh. 11, p . 12) . In his rebuttal testimony, Mr. Watson of PP&L withdrew the Company's attrition request due primarily to the flattening of costs resulting from a

significant cost reduction program. (PP&L Exh. 27, p. 12) The Commission accepts PP&L's withdrawal of a request for an attrition adjustment.

Elasticity Based Revenue Adjustment

127. In this Docket, the Company and the MCC submitted testimony regarding how consumers and businesses respond to price changes and how this response in turn affects the Company's ability to generate an approved revenue requirement. In economic jargon, the behavioral response to a price change is termed an elasticity response, or a change in the quantity demanded. A reduction in the quantity demanded due to a price increase is referred to as repression; conversely, the increase in the quantity demanded due to a price decrease is termed stimulation.

128. This Docket represents the first request of this Commission by PP&L for an elasticity based increased revenue requirement (hereafter referred to as repression). This is not the first instance of such a request of the Commission; however, in other dockets, the Commission has rejected such adjustments until such time as a complete record is established. (Docket No. 82.2.8.)

129. In this Docket, PP&L requests a repression-revenue adjustment of $372,000 (Mr. William Wordley's PP&L Exh. 5 & 6). This request derives from a number of factors, including: (1) a gross repression-revenue requirement of $679,000, with a net of $307,000 in cost offsets (PP&L Exh. 9, p . 18); (2) an average own-price elasticity of demand coefficient of -0.103 (PP&L Exh. 5, p. 4); and (3) an assumed average price increase from year 1982 to 1984 of 23.4 percent (Data Response WEW-8A) .

130. The Montana Consumer Counsel (Mr. George Hess' Exh. 2, p. 15) implicitly endorses the theoretic concept of an elasticity adjustment as evidenced by the following:

> Q. Do you recommend that the Commission adopt an elasticity adjustment?
>
> A. No. The revenue increase I recommend in this case is so minor it should not have a noticeable impact on consumption. That is, had the MCC recommended a major revenue increase, there would apparently have been a noticeable impact on consumption and, hence, an elasticity adjustment would have been recommended.

131. The following summarizes the Commission's findings regarding a repression-based revenue adjustment. First, the Commission finds that the concept of a repression based revenue adjustment is sound on theoretic grounds based on Company and intervenor testimony in this Docket. The issue is whether the adjustment estimate is reasonable.

132. The reasonableness of the repression-based revenue adjustment in turn depends on at least three factors: (1) price increases since the test year; (2) own-price elasticity of demand estimates; and (3) cost offsets. The Commission finds the record deficient on two of these three counts. Based on this deficiency (discussed below), the Commission rejects the Company's repression proposal.

133. The first reason for rejecting the proposal concerns the alleged 23.4 percent increase in price since the test year. The Commission finds that the relevant price increases are those that occur since the end of the test year, and not just price increases that result from the instant Docket (re: Finding No.

129 above). In this regard, however, the Commission finds the record deficient. Based on cross-examination of PP&L Witness Wordley, as well as the Company's testimony j the Commission is uncertain that a double counting of price increases during the test year has not occurred (TR, pp. 57, 58 and PP&L Exh . 5) . The Company could not break down the 23.4 percent average increase by Docket and time of increase.

134. The Commission finds, however, a more important deficiency may exist in the Company's filing. This deficiency regards the apparent inclusion of only short-run cost offsets; i. e., "production cost model related costs" (PP&L Exh. 9, pp. 18, 19).

135. To the extent the Company's cost model is based on long-run incremental costs, it seems only correct that the cost offsets should also include long-run incremental costs. The Commission finds inconsistent the combination of long-run incremental costs for rate purposes, with short-run costs for cost offset purposes. Long-run incremental costs for energy alone amount to approximately 35 mills/KWH (PP&L Exh. 16, Table 16-10). Based on the Company's estimate of repressed MWH sales (-13,190 MWH) and its "production cost model related" cost savings, one can compute an average savings per KWH of only 2.328 cents (TR, pp . 61, 90)

136. The Commission finds that future rate cases including repression estimates should (1) document the percent increases in price since the end of the test year; (2) address the inclusion of long-run avoidable costs in the cost offset analysis. Until such time as a comprehensive record is established, the Commission will continue to deny repression-based revenue requirement adjustments.

Revenue Requirement

137. The following table shows that additional annual revenues in the amount of $301,000 are needed by the Applicant in order to provide the opportunity to earn an overall return of 10.75 percent:

PACIFIC POWER & LIGHT COMPANY
Revenue Requirement to Produce
10.75% Rate of Return
with 1982 Test Year
(000)

	PP&L Pro Forma	MCC Adjustments	Accepted MCC Adj.	PSC Adj.	Accepted Pro Forma	Increase Required to Produce 10.75% Return	Total
Operating Revenues	$26,705	$ 430	$ 430	$ O	$ 27,135	$ 301	$27,436
Operating Revenue Deductions							
O & M Expenses	$15,696	$ (565)	$ 178	$(447)	$ 15,427	$	$15,427
Depreciation & Amortization	2,546	0	0	0	2,546		2,546
Taxes Other Than Income	1,265	0	0	0	1,265	2	1,267
State Income Tax	120	62	32	3	155	20	175
Federal Income Tax @ 46%	762	525	328	21	1,111	128	1,239
Investment Tax Credit	(647)	(446)	(279)	(18)	(944)	(109)	(1,053)
Net Federal Income Tax	$ 115	$ 79	$ 49	$ 3	$ 167	$ 19	$ 186
Deferred Income Taxes	348	(161)	(161)	0	187		187
Income Taxes Deferred in Prior Years	(180)	104	104	0	(76)		(76)
Investment Tax Credit Adjustment	440	94	109	459	55		514
Amortization of Proceeds From Sale	0	(182)	(182)	0	(182)		(182)
Total Operating Revenue Deductions	$20,350	$ (569)	$ 30	$ (432)	$ 19,948	$ 96	$20,044
Net Operating Income	$ 6,355	$ 999	$ 400	$ 432	$ 7,187	$ 205	$ 7,392
Average Rate Base	$69,550	$ (842)	$ (696)	$ (69)	$ 68,791	$ (27)	$68,764
Rate of Return	9.14%				10.45%		10.75%

LRIC Rate Design

138. Introduction. Company witness Ms. Colleen Lynch submitted prefiled testimony (PP&L Exh. 15 and 16) on PP&L's LRIC (long-run incremental cost) model. Mr. Greg Duvall sponsored this testimony in hearing. In addition, Ms. Lorie Harris submitted and sponsored the Company's rate design testimony (PP&L Exh. 17, 18, 19, and 20). No other parties submitted rate design testimony in this Docket.

139. The Commission finds no areas of disagreement with the Company's LRIC testimony. The only areas of contention are rate design related.

140. Class revenue responsibility shall be computed by taking an equal percent of LRIC. To this end, the test year revenues are approximately $23,127,000. In addition to this amount, the final revenue increase in this Docket of $301,000 shall be added.

141. For purposes of computing a final class revenue responsibility, the Commission finds that the rate increase associated with the FERC approved BPA transmission rate increase -- pass through -- of $145,000 (Docket No. 83.10.71) should be included with the final revenue requirement in the instant Docket.

142. The above revenue requirements, when combined, equal $23,573,000. This total amount, as a percent of revenues at "full LRIC" (PP&L Exh. 16, Table 16-15), equals 63.91 percent. Consequently, the class revenue responsibilities are as follows:

Table 1
Class Revenue Responsibility

Class	(000)
Residential	$12,542
General Service	6,977
Large General Service	4,024
Street and Area Lighting	29
Total	$23,572*

Source: PP&L Exh. 16, Table 16-15.
* The total does not sum to $23,573,000 due to independent rounding.

143. Residential Class Rate Design (Schedule 73. The current residential rate design (pre-interim) features a Minimum Bill of $2.75 and the energy rates set forth in Table 2 below:

Table 2
Current Residential Energy Rate Design

	¢/kwh
Winter: less than 300 kwh	3.04
next 1000 kwh	4.48
greater than 1300 kwh	6.265
Summer: less than 300 kwh	3.04
next 300 kwh	4.48
greater than 600 kwh	5.696

Source: PP&L Exh. 18, page 18-4.

144. The Company's proposed residential rate design features a Basic Charge of $2.75 and the following energy rates:

Table 3
PP&L's Proposed Residential Energy Rates

	¢/kwh
Winter: less than 300 kwh	4.017

next 1000 kwh	5.457
greater than 1300 kwh -	7.242
Summer: less than 300 kwh	4.017
next 300 kwh	5.457
greater than 600 kwh	6.673

Source: PP&L Exh. 19, page 19-3.

145. The Commission finds merit in the Company's proposed Basic Charge. Minimum Bills amount to take-or-pay contracts. In addition, Minimum Bills prohibit the Commission's staff from verifying the revenues generated from alternative rate designs. The Commission finds, however, that the Basic Charge and the existing three-step inverted block rate structure needs tempering.

146. The Commission finds that the Basic Charge shall equal $2.0 per month in lieu of $2.75. A $2.0 service charge, while not compensatory, will moderate customer impact (from PP&L Exh. 16, Table 16-7 total residential billing related costs are $4.81 per month).

147. The Commission finds that a two-step inverted block rate structure is preferable to the existing three-step inverted block. The economic merit of the two-step inverted block rate structure, relative to a flat rate structure, should be addressed by the Company in its next electric rate proceeding.

148. The Commission finds that the energy rates (¢/kwh) should, to the extent possible, reflect the LRIC study results. To this end the winter tail-block energy rate would, on a strict LRIC basis, equal approximately 5.704¢/kwh(1).

149. Rates set equal to LRIC study results, however, would generate excess revenues and, consequently, must be moderated. In addition, the Commission finds that the existing 10 percent seasonal differential in the tail-block energy rates shall be maintained. The Company's testimony, in its next rate case, should address the economic merit of this differential.

150. The following Table 4 provides estimates of the energy rates assuming a total revenue requirement of $23,412,000 (the $23,127,000 test year revenue requirement and an initially expected increase of $285,000), and will necessarily increase due to the final increase of $301,000 and the BPA pass through:

Table 4
Residential Rate Design

	Winter	Summer
Basic Charge ($/month):	$2.0	$2.0
Energy (¢/kwh):		
less than 300 kwh	3.248	3.248
greater than 300 kwh	5.260	4.784

151. The Commission finds that any remaining increase to the energy rates in Table 4 above should be to the initial block rates, as these rates

(1) This rate represents a combination of (1) the 3.624¢/kwh energy-related LRIC with a 12 percent winter energy loss factor and (2) the $63.00/kw demand related generation and transmission

cost converted into an energy rate of 1.585¢/kwh by dividing by the product of 8760, a 54 percent load factor and one minus a 16 percent winter peak loss factor (see PP&L Exh. 16, Table Nos. 16-10 and 16-13, and Data Response GEL-27). Note, this figure of 5.704¢/kwh does not include any demand related distribution costs.

are below the approximate 4.118¢/kwh LRIC study result for just energy related costs(1).

152. General Service Rate Design. The existing General Service Rate Design (Schedules 22 and 24) features two load levels: one for demand metered and the other for nondemand metered customers. The demand metered rates feature (1) a flat energy rate, (2) seasonally differentiated demand charges, and (3) a Minimum Bill. The nondemand metered rates feature a seasonally differentiated energy rate and a Minimum Bill.

153. PP&L proposes major revisions to the existing General Service rate design. The proposed rate design more accurately reflects results from the LRIC study -- an objective the Commission finds desirable. PP&L also testified (TR, p. 192) that the proposed rate design has been adopted by every other state in its six-state jurisdiction.

154. The Company's proposed General Service rate design features Basic, Demand, and Energy Charges as follows:

(1)From PP&L Exh. 16, Table 16-10 the LRIC for energy alone is 3.624¢/kwh. When divided by one minus the secondary voltage level line loss factor of 12 percent a cost at the meter equal to 4.118¢/kwh is derived.

Table 5
PP&L's Proposed General Service Rate Design(1)

Basic Charge: (2)

If Load Size Is:	The Monthly Basic Charge Is: Single Phase	Three Phase
15 kw or less	$5	$8
16 kw-100 kw	$5 plus $.70/kw for each kw in excess of 15 kw	$8 plus $.70/kw for each kw in excess of 15kw
Over 100 kw	$10 plus $.55/kw	$13 plus$.55/kw

Demand Charge:

Winter	Summer	
No Charge	No Charge	For the first 15 kw of demand
$2.65	$1.77	All kw in excess of 15 kw

Energy Charge:

Winter	Summer	
4.892¢	4.467¢	Per kwh for the first 3,000 kwh
4.467¢	4.467¢	For all additional kwh

(1) These rates assume the final increased revenue requirement of $5, 825,OOO is granted, and exclude the BPA exchange credit for Schedule 24 customers.

(2) The kw load size is the average of the two highest months in the preceeding year ending with the current month.

155. In post-hearing correspondence to the Commission (Ms. Lorie Harris' letter dated December 13, 1983), the Company acknowledged the existence of "greater impacts on the customer than we expected, " with reference to the proposed General Service Rate Design. To temper the impact, PP&L proposes to exactly halve the variable portion of the basic charge, i.e., the $0.70 and $0.55 rate per kw would be reduced to $0.35 and $0.27 per kw respectively; to compensate for the

resulting reduced revenues the energy rates are increased slightly.

156. The Commission finds the originally proposed General Service Rate Design, with the following changes, better reflects the LRIC results. The Commission also finds that PP&L's proposed fixed component of the Basic Charge results in an adverse impact on a large number of customers that use a relatively small amount of energy (kwh) per month. To moderate the rate impact, the fixed components of the Basic Charge shall be reduced 25 percent.

157. The following Table 6 provides the Commission's estimated General Service rates. The rate levels for the Basic and Demand Charges are actual, however.

Table 6
General Service Rate Design and Rates(1)

Basic Charge:(2)

If Boad Size Is	The Monthly Basic Charge Is Single Phase	Three Phase
15 kw or less	$3.75	$6.00
16 kw-lOO kw	$3.75 plus $.70/kw for each kw in excess of 15 kw in	$6.00 plus $.70/kw for each kw excess of 15 kw
Over 100 kw	$7.50 plus $.55/kw	$9.75 plus $.55/kw

Demand Charge:

Winter	Summer	
No Charge	No Charge	For the first 15 kw of demand
$2.25	$1.50	All kw in excess of 15 kw

Energy Charge:

Winter Summer

4.023¢	3.660¢	Per kwh for the first 3,000 kwh
3.660¢	3.660¢	For all additional kwh

(1) These rates assume a final increased revenue requirement of $285,000 is granted, and exclude the BPA exchange credit for Schedule 24 customers.

(2)The kw load size is the average of the two highest months in the preceeding year ending with the current month.

158. The Commission finds that the General Service tariff should feature language making clear that nondemand metered customers face a "Basic Charge" with a fixed rate component of $3.75 or $6.00 depending on the phase of service.

159. To the extent the combined final revenue increase exceeds $285,000, any increased revenue responsibility for this class should be reflected in an increase to the 4.0234/kwh winter energy rate for less than 3000 kwh/month. The Commission finds this adjustment to be sound as the 4.0234/kwh falls considerably below the LRIC study result of 5.7044/kwh (see Footnote No. 1 to Finding No. 148 above).

160. Large General Service Rate Design. The present rate design (preinterim rates) for this class features (1) a $46.25 Minimum Bill, (2) a flat energy rate of 2.998 cents per kwh, and (3) seasonally differentiated demand charges (summer rate of $1.30, winter rate of $1.94).

161. PP&L's proposed rate design is similar except for the Minimum Bill. In lieu of a Minimum Bill, PP&L proposes a Basic Charge of $60/month and a $0.50/kw load size. As with General

Service (Schedules 22, 24), the kw load size is the average of the two highest months in the preceeding year ending with the current month. The following Table 7 summarizes PP&L's proposed rate design:

Table 7

PP&L's Proposed Rate Design
For Large General Service Customers

Basic Charge: $60.0/month plus $0.50/kw load size.

	Winter	Summer
Energy (¢/kwh):	3.51	3.51
Demand:	$2.27/kw	$1.51/kw

Source: PP&L Exh. 19, Page 19-16.

162. The Commission finds that PP&L's proposed rate design requires modification. This modification in turn stems from the energy rates that would result if PP&L's Basic Charge was tariffed and the PP&L final revenue requirement is approximately as stated in Finding of Fact No. 150 above.

163. From the Company's cost study, the energy related portion alone equals 3.624¢/kwh (PP&L Exh. 16, Table 16-10). When adjusted for an 8 percent winter line loss the energy related LRIC, at the meter, equals 3.939¢/kwh.

164. Based on correspondence between the Company and the Commission (workpapers assuming a $285,000 final increase from Ms . Harris received January 20, 1984), a Basic Charge of $45.00 per month and $0.50/kw load size would result in an energy rate of 2.86¢/kwh and demand charges of $1.84 (winter) and $1.23 (summer) .

165. Based on the above LRIC for energy alone (3.9394/kwh), the Commission finds that the variable component of PP&L's Basic Charge ($0.50/kw load) should be eliminated and the related $158,909 in annual revenues recovered from the energy component. In addition, any additional class revenue requirement must be recovered from the energy charges only. The Commission finds the following rate design appropriate for this class:

Table 8
Large General Service Rate Design(1)

Basic Charge: $45.00/month

	Winter	Summer
Energy (¢/kwh)(2):	2.992	2.992
Demand ($/kw):	1.84	1.23

(1) The energy rate of 2.992¢/kwh equals the summation of 2.86¢/kwh, and the revenues generated by the variable component of the Basic Charge ($158,909) divided by test year kwh billing determinants (approximately 120 million kwh).

(2) This rate will increase for the reasons cited in Finding of Fact Nos. 141 and 162 above.

166. Lighting Class Rate Design. PP&L did not propose a rate design change for the lighting class schedules. PP&L did, however, propose a "rachet effect" or "floor" of sorts to the rates as evidenced by

the following Data Request Response from PP&L:

Q. Please explain why the Lighting Service schedule received no rate increase from the current LRIC. Assuming less than the total revenue increase request of $5,825,000 is granted, is not a rate reduction in order for the schedule?

A. Because present revenues from the Lighting Service schedule are at the approximate equal percent of proposed LRIC revenues, no revenue increase is proposed. Assuming the ordered increase is less than requested, a rate reduction would not be proposed for the schedule as long as the revenues from the Lighting Service schedule are at less than their respective full LRIC revenue level. Pacific believes that it is inappropriate to propose that a particular class of customers receive a decrease in the context of a rate increase proceeding as a result of mechanically "locking into" the results of a particular cost study. Given that energy is becoming increasingly expensive, a class of customers should not be given a false signal about the future course of energy prices. (Data Response LGH-1).

167. The Commission finds inappropriate the Company's proposal in this regard. If the Lighting Class revenue requirement falls in this Docket relative to the previous, for whatever reason, the rates should also decline. The proposed "floor" rates equal to pre-interim levels are denied. The Commission approves of the proposal to remove section (f) Outdoor Area Lighting Service on Sheet No. R.3.

Rebates

168. Because the interim increase in this Docket of $1,575,000 is greater than the final increase of $301,000 a rebate condition

has developed . In addition, ordering paragraph No. 5 of the Interim Order No. 5009 established a rebate interest rate of 14.5 percent.

169. The Commission finds that PP&L must compute class specific overcollections that result from the differential between the interim rates (demand, energy, and minimum bills), that went into effect on August 3, 1983, and the rates that would have been in effect assuming a uniform percent increase for a $301,000 final increased revenue requirement.

170. Interest must be accrued from the time PP&L received revenues, based on the interim rates, until the time the final rates are in effect. From communication between the Commission staff and the Company, the Commission understands that the class specific overcollections, for rebate purposes, cannot be computed to take effect until the March billing cycle that begins on February 27, 1984; this is the latest acceptable date to the Commission for making rebates to customers.

171. The Commission understands (based on Commission staff/Company communication) that the most efficient means of rebating the overcollection to each customer class is on a one-time credit basis. That is, a lump-sum credit, and not a per kwh rate reduction, is, from an administrative efficiency basis, a least-cost approach to rebating each class' total overcollection. The Commission finds this method appropriate.

172. For the Residential- (Sch. 7), General Service (Sch. 22 & 24) and Lighting Classes, the Commission understands (Commission Staff/Company communication) that the most efficient means of rebating each class' total overcollection is by computing the

percent each individual customer's kwh consumption represents of the total forecast consumption for the class; then, in the March billing cycle the Company would attempt to refund each class' total overcollection. The Commission finds this proposal to be reasonable and only adds that, if there remains any positive overcollection after the March rebate, the Company should repeat the procedure in the month of April.

173. For the Large General Service customer class (Sch. 48T), the Commission finds that the Company should simply compute each customer's actual overcollection and in turn make a one-time payment to each customer.

174. Each customer's bill in the March billing cycle must include language explaining that the rebate amount is due to a combination of a lower final revenue requirement, relative to the interim, and interest at 14.5 percent.

CONCLUSIONS OF LAW

1. The Applicant, Pacific Power and Light Company, furnishes electric service to consumers in Montana, and is a "public utility" under the regulatory jurisdiction of the Montana Public Service Commission. 69-3-101, MCA.

2. The Commission properly exercises jurisdiction over the Applicant's rates and operations. 69-3-102, MCA and Title 69, Chapter 3, Part 3, MCA.

3. The Commission has provided adequate public notice of all proceedings and opportunity to be heard to all interested parties

in this Docket. Title 2, Chapter 4, MCA.

4. The Commission has the discretion to temporarily approve a rate increase pending a hearing or final decision. If the Commission finds that the interim rate increase is unjustified in its Final Order, the Commission will order a rebate with interest to all consumers for the amount collected retroactive to the date of the temporary approval. 69-3-304, MCA.

5. The rate level and rate structure approved herein are just, reasonable, and not unjustly discriminatory. 69-3-330, MCA.

ORDER

1. The Pacific Power and Light Company shall file rate schedules which reflect increased annual revenues of $301,000.

2. The increased rates authorized herein shall be effective for service on and after February 6, 1984.

3. Rate schedules filed shall comport with all Commission determinations set forth in this Order.

4. Pacific Power and Light Company's final rate calculations are to be supported by detailed working papers showing: (1) test year billing determinants per Schedule for each season and rate; (2) Docket No. 83.5.36 final c rates and Docket No. 83.10.71, additional interim rates (Order No. 5028a); and (3) the product of (1) and (2) above, summed, equalling the total revenue requirement. Test year billing determinants must be provided for the new General Service (Sch. 22/24) Basic Charge elements.

5. Pacific Power and Light Company must, for each customer class, submit for verification detailed working papers showing the actual overcollection, with interest at 14.5 percent, that will be rebated. This data must be for each billing cycle since the interim rates have been in effect in Docket No. 83.5.36. For the Large General Service class this data must be customer specific. The customer bills in the month of March that include the rebate, must include an explanation of the rebate as provided in Finding of Fact No. 174.

6. The Applicant's tariff submittal shall reflect the current BPA Exchange Credit for qualifying schedules.

7. At the end of the Company's April billing cycle the Applicant must provide a summary report of the overcollections actually rebated to each customer class.

8. All motions and objections not ruled upon are denied.

DONE AND DATED this 6th day of February, 1984 by a vote of 3-0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION.

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Thomas J. Schneider, Chairman

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Clyde Jarvis Commissioner

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Howard L. Ellis, Commissioner, Presiding

ATTEST:

Madeline L. Cottrill
Commission Secretary
(SEAL)

NOTE: Any interested party may request the Commission to reconsider this decision. A motion to reconsider must be filed within ten (10) days. See 38.2.4806, ARM.